

# Coverage of Beverage Alcohol Issues in the Print Media in the United States, 1985–1991

## ABSTRACT

**Objectives.** This study assessed the portrayal of alcohol-related issues in the print media in the United States during the 7-year period bracketing implementation of the US alcohol warning label act in November 1988.

**Methods.** All articles that appeared from 1985 to 1991 in 5 national newspapers and that were indexed as dealing with beverage alcohol were identified. Content analysis of a 15% sample of these articles allowed an in-depth assessment of the conceptualization of alcohol in the US print media.

**Results.** A slight decrease in articles related to alcoholism was offset by an increase in articles about the more general health-related effects of alcohol. The warning label act received little attention. Most articles portrayed alcohol neutrally or negatively, using information from government sources.

**Conclusions.** Portrayal of alcohol in the US print media has changed in recent decades. A general shift noted as early as the 1960s has increasingly emphasized public health issues and deemphasized clinical aspects of alcoholism. This has been accompanied by a continuing shift away from a biopsychological definition of alcohol-related behavior to a definition stressing external environmental factors. (*Am J Public Health*. 1999;89:1555–1560)

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In November 1988, the US government enacted a law requiring warning labels on all alcoholic beverage containers sold in the United States.<sup>1,2</sup> The label warns of alcohol-related hazards to pregnancy, in operating a motor vehicle, in operating machinery, and to health in general. The primary goal of the warning is to raise public awareness of these hazards of alcohol use. As part of an evaluation of the policy requiring alcohol warning labels,<sup>3,4</sup> we conducted a study of which one aim was to describe the way the warning label issue had been presented in the US print media during the period of time bracketing enactment of the warning label law in November 1988. Because no media campaign was mounted to support enactment of the law, the public received only the information presented in the regular media.

In addition to presenting an evaluation of the warning label debate in the US print media, this article describes the extent and nature of the print media's coverage of alcohol-related issues in general during the 7-year period bracketing enactment of the warning label law. We present a quantitative analysis of characteristics available for all articles on alcohol and a content analysis of a stratified sample of articles from 5 national newspapers from 1985 through 1991. Major areas of interest included each selected article's exact subject area, its evaluation of the alcohol issue, its sources of information, and its conceptual orientation with regard to alcohol consumption.

## Background

### *The Mass Media and the Public*

Our study was not designed to answer the more fundamental questions about the relationship between the mass media and public beliefs, attitudes, and opinions about alcohol consumption. Possible roles of the news media range from merely reflecting

popular beliefs and attitudes to acting as a cultural agent for change in the public perception of a particular topic.<sup>5</sup> Most studies of media influence report high positive associations between media coverage and public perceptions of social issues,<sup>6</sup> but few show direct effects of publicity.<sup>7</sup> Researchers skeptical of the influence of the news media have argued that, more than actually changing opinions, the media set the agenda for political debate of an issue, affecting what people perceive as political, social, or cultural priorities<sup>8</sup> or the “symbolic agenda” of policymakers.<sup>9</sup> Media coverage not only supplies the public and politicians with details about news items but also informs them indirectly about the importance of social issues. For example, changes in the proportion of the public that perceived drugs as the “most important social problem facing the nation today” were found to correlate with the frequency with which the print media described drug abuse as a crisis.<sup>10</sup>

Although a recent review concluded that “the media have an influence in shaping the debate about alcohol consumption,”<sup>11(p240)</sup> the

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**Note.** The opinions expressed in this article are those of the authors and do not necessarily reflect those of the sponsoring institutions. The article is based on a paper initially presented during the 19th annual Alcohol Epidemiology Symposium of the Kettli Bruun Society, Krakow, Poland, June 5–11, 1993. The research described in this article was based solely on archival sources and did not involve the use of human subjects.

This article was accepted March 30, 1999.

exact role of the media in the formation of public attitudes and opinions about alcohol remains difficult to specify.<sup>12,13</sup> Direct effects of the mass media on alcohol consumption and drinking-related behavior are believed to be rare, small, and often short-lived.<sup>14,15,16</sup> nevertheless, the media determine public exposure to these topics and are therefore a valuable subject of study.

### *Previous Research on Print Media Portrayal of Alcohol and Alcohol-Related Problems*

In an analysis of popular magazines, Linsky<sup>17</sup> found a shift from a moralistic view of alcoholism in the first decades of the 20th century to a naturalistic view in the 1960s. There were shifts away from an internal biological or psychological explanation for alcoholism toward an endorsement of external causes for its occurrence, with less stress on individual vulnerability. Interestingly, this shift presaged a similar change in public health paradigms in the United States.<sup>18</sup>

In their analysis of the scientific literature on alcohol and the public image of alcohol consumption in the popular print media in Ontario from 1950 to 1980, McKenzie and Giesbrecht<sup>19</sup> showed that perception of the consequences of alcohol abuse broadened from the "most obvious and perceptible consequences of excessive use" in the 1960s to the view of alcohol as being involved in or a direct cause of 4 of the 5 most serious social problems in the 1970s. They observed a shift from an emphasis on the impact of drinking on public health and disruption of private life in the 1950s, via the drinking-and-driving issue of the 1960s, to a primary concern with the economic impact of drinking in the 1970s. McKenzie and Giesbrecht inferred a gradual broadening of the public perception of the scope of the alcohol issue and of the segment of the population that could be considered at risk for alcohol-related problems.

In the early 1980s, coverage of alcohol-related problems in the United States grew sharply in association with the growth of Mothers Against Drunk Driving (MADD). In a quantitative analysis of 5 national newspapers, Hingson et al.<sup>20</sup> showed that the number of articles on driving under the influence (DUI) of alcohol had risen from fewer than 20 in 1980 to more than 150 in 1983 and 1984. After a 1984 peak, editorial interest in the DUI issue faded but remained higher than before the MADD movement (at approximately 60 articles in the 5 national newspapers in 1986). Luckey et al.<sup>21</sup> found that before official steps toward DUI legislation were taken, coverage of alcohol-related issues in the 5 largest North Carolina news-

papers was almost nonexistent. After growth of the MADD movement stabilized and legislation was enacted, editors lost interest in these issues.<sup>21</sup> A similar pattern was reported for media coverage of drug-related issues.<sup>11,22</sup>

## **Methods**

Our analysis covered the years 1985 through 1991, a period ranging from 3.5 years before to 3.5 years after enactment of the federal warning label law in November 1988. We drew newspaper articles from the National Newspaper Index (NNI), which indexes all relevant articles on a given topic in the *Los Angeles Times*, *Washington Post*, *New York Times*, *Christian Science Monitor*, and *Wall Street Journal*. We studied only printed nationwide material because of technical accessibility of the information we sought (the NNI is an electronic database). More exhaustive surveys were precluded by the volume of published or broadcast materials and the costs connected with their retrieval.

Observed changes in the interest in specific topics may be reflected not just by a decline or rise in overall attention to them in the news media, but merely by a shift from one topic to another, such as the shift in attention from Colombian drug lords to domestic drug problems in the United States.<sup>22</sup> For this reason, our analysis covered several alcohol-related areas where such shifts might take place. We therefore searched the NNI by title and subject heading, using the key word "alcohol" and additional key words, individually or in combination. We assigned topics to 5 categories, designated A to E, on the basis of key-word combinations.

One main content-coding category (category A) focused on the more "obvious and perceptible" outcomes of excessive alcohol use, abuse, and addiction. This category included the added key words "alcoholism," "alcoholics," and "treatment" (plus "Alcoholics Anonymous"), or combinations of these key words. The second category (category B) contained topics that related alcohol to health risks more widely distributed across the population. This category was searched with the key words (or combinations thereof) "alcohol" and "health," "cancer," "drunk driving" (plus "DUI" and "DWT" [driving while intoxicated]), "accidents," and "drinking during pregnancy" (identified by the key words "fetal alcohol syndrome [FAS] and "birth defects"). A third category (category C) dealt with societal problems stemming from and responses to alcohol consumption, such as policy issues, employment issues, and advertising. The fourth category (category D) contained articles whose key words fell into 2 or

more of the first 3 categories (A to C). Category E contained all articles that had a reference to warning labels.

Because of the number of articles that fell into 1 or more of the 5 study categories (a total of 1677), a selection had to be made before a more elaborate content analysis could be done. Our procedure for sampling articles in the NNI involved a stratification according to category (A–E). Articles falling into categories A and B were about twice as numerous as those in category C. Articles in category D were even rarer, with an average occurrence of once a month. We therefore decided to weight our samples. Those in categories A and B were stratified by month and were randomly sampled within each month at the rate of 1 sample every month; similarly, samples from categories C and D were taken at the rate of 1 every 2 months. All 33 articles in which warning labels were mentioned were included in the content analysis. The 264 articles resulting from the sampling process were copied from microfilm, read, and scored by a single rater (3 articles on microfilm could not be traced to their origins).

Articles were evaluated according to their physical characteristics, including their type (e.g., news report, editorial), length, the newspaper section in which they appeared, and the page number on which they appeared. These characteristics permitted assessment of the salience of the information contained in an article. Items in the qualitative protocol of the study included the origin of the information on which an article was based (e.g., reporter's own research, government, industry) and the article's scope (single event vs general issue); slant (negative or positive appreciation of alcohol); impact (regional vs national significance); content area (psychological, medical, behavioral, legal, social, or political); and conceptual orientation (items on internal/individual vs external/environmental explanations for alcohol-related problems, and a scientific vs moralistic stance).

To assess the consistency and reliability of the scoring procedure, a second rater coded 30 randomly chosen articles. The interrater agreement of the 2 raters' scoring of selected items was assessed with the  $\kappa$  coefficient (see Interrater Reliability, p 1558).

## **Results**

### *Analysis of NNI Information Available for All Articles*

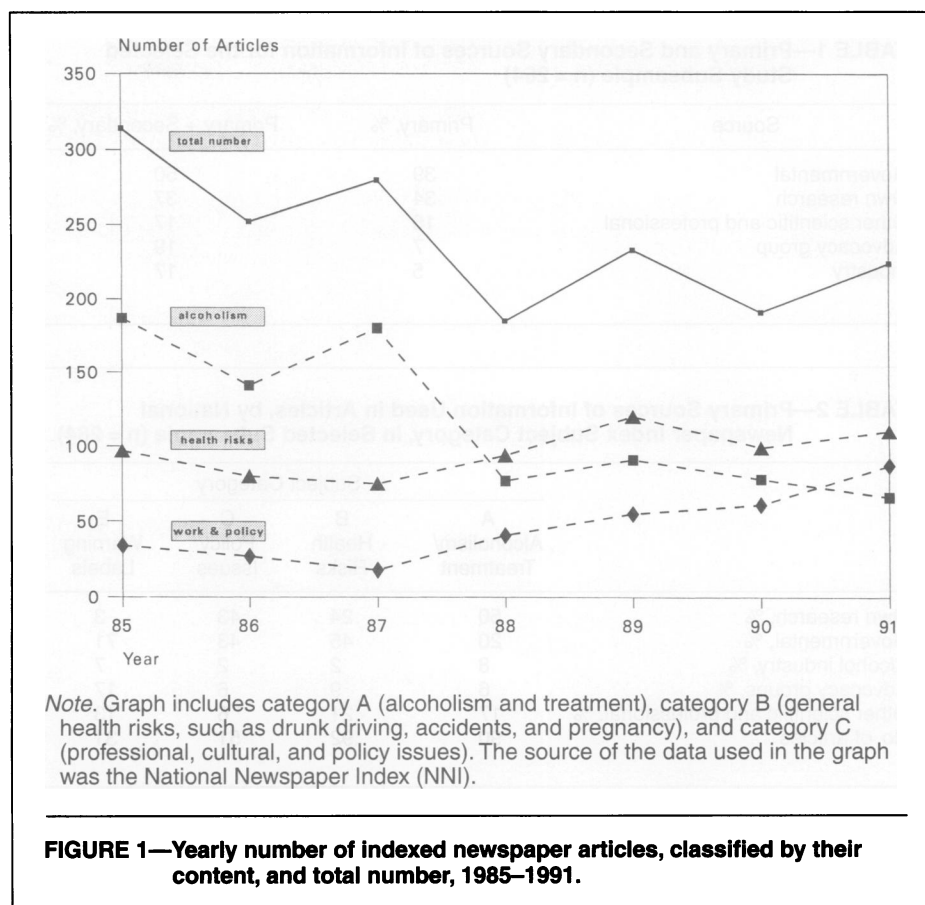
Nearly half of the articles on alcohol-related issues identified in the NNI ( $n = 1677$ ) were indexed as dealing with issues

related to alcoholism and its treatment (category A;  $n = 734$ ), with more than half of these articles related to treatment ( $n = 410$ ). Articles on alcohol as a public health issue (category B;  $n = 589$ ) ranked second, with just over one third of all entries. Drunk driving was by far the single most important contributor to this category ( $n = 402$ ). Less than one fifth of the articles on alcohol pertained to topics in category C ( $n = 237$ ), which related mainly to alcohol policy issues ( $n = 138$ ). Only just under 2% ( $n = 33$ ) of the articles directly referred to the warning label issue.

Monthly variation in the number of articles related to alcohol was limited (monthly publication rate of about 20), but the frequency of appearance of alcohol-related articles increased (to about 30 per month) toward the end of the calendar year, concurrent with the holiday season, when alcoholic beverage sales are highest. When examined by year, the total number of articles examined for the years covered by the study decreased by about 30%, mainly owing to a decrease after 1987 in the number of category A articles focusing on alcoholism and its treatment (from about 190 in 1987 to 70 in 1991) (Figure 1). Articles dealing with the other categories examined in the study were fairly stable in frequency or showed a slight increase over the study period. The steady increase after 1987 of articles in category C, on alcohol-related issues in work and alcohol policy formation, was noteworthy. The number of articles on warning labels never exceeded 3 per month during the study period (data not shown). Most of the articles on the warning-label issue appeared at about the time that the warning-label law was enacted by Congress (7 in 1987 and 9 in 1988). There was a small spurt of attention to alcohol-related issues when the warning labels first appeared on beverage containers (November 1989), but this coverage was not sustained in the first year after implementation of the law.

#### Content Analysis of Sampled Articles

A total of 264 articles were evaluated and coded, with stratification by major category and month of publication. A random procedure was used to categorize articles within the strata. Despite this temporal stratification, the number of articles coded per year varied from 33 to 45 (average = 37). Monthly variation in frequency ranged from 2.6 to 3.6 articles (average = 3.1). Most of the reviewed articles appeared on Tuesdays (22%) and Sundays (18%), with the lowest coverage on Saturdays (7%). Most of the reviewed articles appeared in the *New York*



**FIGURE 1—Yearly number of indexed newspaper articles, classified by their content, and total number, 1985–1991.**

*Times* (38%), with the lowest coverage found in the *Christian Science Monitor* (5%). Half of all articles were news reports (51%), followed by feature (22%) and column-type articles (16%). Editorials (4%) and letters to the editor (8%) constituted less than one seventh of all reviewed articles.

Less than 10% of the articles appeared on the front page of the newspapers examined in the study, and about half were located in the first (A) section of the newspaper. Similar data were found for articles in the second (B) section. Approximately one third of the articles contained an illustration or photograph.

Half of the articles reported single alcohol-related events, and the other half reported general issues. About one quarter of the articles referred to specific populations (ethnic 5%, youth 25%, women 22%). More than one third of the reviewed articles related to a political or alcohol policy issue (38%), with judicial and law enforcement (17%) and medical issues (15%) being the next most frequent topics. About one third of the articles stressed the negative health effects of drinking (<2% mentioned positive effects), but the majority of articles (56%) did not relate to the health effects of drinking.

Prime sources of information for the articles were largely government agencies or the journalist's own research (Table 1). When the second source of information (2 possible

entries were offered in the coding manual) was also taken into consideration, the proportion of articles based (at least partly) on the reporter's own research was 37%, while a government source was used in half of all cases. The number of articles that used (primary or secondary) information from advocacy organizations was well balanced with the number of articles that used the alcohol industry as a source. In only 6 cases did the writer of an article use information from both advocacy organizations and the alcohol industry.

Table 2 shows that articles indexed in the NNI as related to general health and policy issues (categories B and C) were based on a government source more than twice as often as articles on alcohol abuse-related topics (category A). Not surprisingly, most of the articles on warning labels were based on government information. When both the primary and the optional secondary source of information were taken into account (results not shown), alcohol industry-based articles most often dealt with warning labels (32%), whereas articles inspired by advocacy organizations most often dealt with public health issues (category B; 51%).

Overall, the slant or attitude toward alcohol conveyed in the articles tended to be either neutral or ambivalent (53%) or negative (45%). Headlines most often expressed a

**TABLE 1—Primary and Secondary Sources of Information for the Selected Study Subsample (n = 264)**

Source	Primary, %	Primary + Secondary, %
Governmental	39	50
Own research	34	37
Other scientific and professional	16	17
Advocacy group	7	19
Industry	5	17

**TABLE 2—Primary Sources of Information Used in Articles, by National Newspaper Index Subject Category, in Selected Subsample (n = 264)**

	Subject Category			
	A Alcoholism/ Treatment	B Health Risks	C Policy Issues	E Warning Labels
Own research, %	50	24	43	3
Governmental, %	20	45	43	71
Alcohol industry, %	8	2	2	7
Advocacy groups, %	6	9	6	17
Other scientific and professional, %	17	21	6	13
No. of articles	90	92	51	31

neutral attitude (70%) and seldom (in only 3 cases) had a positive valence. With regard to the slant of the articles according to the source of their information (Table 3; the few items with a positive slant were omitted), one can discern a relatively even balance between a neutral and a negative slant for articles based on the reporter's own research and on scientific and other professional sources. Articles based on advocacy organizations and the alcohol industry were slanted in opposing directions; the attitude expressed in industry-based articles was almost never negative, and two thirds of advocacy organization-based articles had a predominantly negative valence. When both the primary and secondary sources of information were taken into account (results not shown), industry-based articles were mainly neutral, whereas 51% of advocacy organization-based articles were negative. Nearly two thirds of government-based articles were neutral. Most (two thirds) of the articles in category A expressed a neutral position toward alcohol, whereas approximately half of the articles in categories B and C were negative.

The slant of articles also varied by newspaper (results not shown); the *Wall Street Journal* and *New York Times* had the least negative slant (32% of all articles), and the *Christian Science Monitor* had the least neutral or ambivalent slant (31%). Most negative about alcohol were editorials (about 80%), followed by feature articles (55%). Most neutral were news reports and columns (61% and 66%, respectively). The proportion of articles

with a negative slant increased from 37% in 1985 to 57% in 1989, with a sudden decrease to the 1985 level of negativity in about one third of all articles in 1990 and 1991 (results not shown).

Half of all of the articles were rated as having an external orientation toward the etiology of alcoholism or alcohol-related problems, while 11% were rated as ascribing the cause of problems to the individual. The orientation toward causation could not be evaluated in more than one third (36%) of articles. Closely related to the internal/external orientation was the model based on the viewpoint of the author or persons in the article, which was categorized as medical (alcohol as a disease entity), environmental (alcohol as an environmental hazard), or sociocultural (alcohol use and abuse being culturally and contextually determined). In 46% of the articles the environmental model prevailed. The medical model was found to be present in only 8% of the articles, and the sociocultural model in 11%. Most articles (92%) expressed a naturalistic stance on alcohol-related problems (ascribing them to circumstances, with the abuser as the victim). Alcohol-related problems were described in either scientific terms, as the outcome of a natural process, or moralistic terms, with the user or abuser blamed for such problems. In 35% of the cases, no evaluation of fault could be made. All articles with a medical orientation were rated as showing an internal orientation; articles reflecting the environmental and sociocul-

tural models usually (>90%) took an external perspective (results not shown).

### *Interrater Reliability*

An analysis of the stability and consistency of the 2 raters' scoring in our study was done with a subset of 30 randomly sampled articles, stratified by category. The interrater agreement for the items in these articles was quite high. For more objective items, such as day, month, year, and type of newspaper, the agreement between the 2 raters in coding a random sample of 30 articles was almost 100%. For more evaluative items, the  $\kappa$  coefficients ranged from 0.4 to 1.0, with most  $\kappa$  values exceeding 0.65. The lowest  $\kappa$  value (0.4) was found for the answers to the question about the conceptual model to which the article adhered. Most disagreement was about the choice between the environmental and sociocultural models, with the prime rater having a preference for the first and the second rater showing a tendency, but less consistently, toward the "no model" option. A lower agreement ( $\kappa = 0.5$ ) was also found for the variable orientation (internal/external), where again the second rater appeared to choose the "no evaluation possible" option more frequently than did the prime rater. For the important variable of slant, a  $\kappa$  value of 0.78 was found, with disagreement in only 3 cases. The variable "prime subject of article" had high agreement, with  $\kappa$  values of 0.95 (rater's own judgment) and 0.86 (based on the NNI list). Overall, we can be fairly confident that idiosyncrasy in coding by the prime rater fell within reasonable limits.

### *Discussion*

Unlike the dynamic developments in the period from 1978 through 1985,<sup>20</sup> attention to alcohol-related issues in the print media did not show dramatic changes in the period from 1985 through 1991, although drunk driving remained the alcohol-related issue receiving the most national coverage. This finding can be explained by the major legislative change that occurred in this area during the 1980s. Higgens<sup>23</sup> reported that between 1980 and 1988, more than 720 state laws on drunk driving were enacted in the United States. Another factor in the prevalence of articles on drunk driving could be that newspapers have a general tendency to overemphasize unnatural causes of death.<sup>24</sup>

A striking finding was the decreased coverage, during the second half of the study period, of issues related to alcohol abuse and alcoholism and of the ill effects of alcohol on the individual and society. This could have

**TABLE 3—General Attitude Toward Alcohol (Slant) Expressed in Article by Source of Information and by Subject Category in Selected Subsample (n = 264)**

	Slant		
	Negative, %	Neutral/ Ambivalent, %	Marginal, %
<b>Source<sup>a</sup></b>			
Own research (34%)	51	49	100
Governmental (39%)	39	61	100
Alcohol industry (5%)	8	92	100
Advocacy (7%)	61	39	100
Scientific and other professional (16%)	46	54	100
<b>Category<sup>a</sup></b>			
A: Alcoholism/treatment (34%)	35	65	100
B: Health risks (35%)	47	53	100
C: Policy issues (19%)	53	47	100
E: Warning labels (12%)	48	52	100

<sup>a</sup>Percentage in category given in parentheses.

been the result of the gradual shift in perspective, previously noted by researchers investigating alcohol-related issues over longer time periods,<sup>17,19</sup> toward increasing emphasis on public health issues, with a deemphasis of vagrant (“skid row”) and clinical alcoholism (although neither has necessarily become less prevalent). Correspondingly, the scant coverage of the warning label issue may be due to the lack of controversy about the failure of mandated labeling of alcoholic beverages to raise enough sustained controversy to become a continuing topic of interest.<sup>3</sup>

A remarkable finding was the extensive use of government information sources. Clearly, government has a legislative/regulatory task, and few laws pass without public debate and media attention. One such policy debate that occurred during the study period focused on the acceptability of random roadblocks for identifying drunk drivers. Interestingly, information on health-related aspects of alcohol consumption was most often drawn from government sources, whereas reports on alcohol abuse and alcoholism were usually based on a reporter’s research. This may well reflect the individual, human interest character of many reports about alcohol abuse, as opposed to the more technical-epidemiologic knowledge required for articles on health-related issues. Our study did not evaluate how accurately such sources were used, and we note that consulting government documents does not ensure fidelity of reportage, as has been noted in the cases of both breast cancer and alcohol consumption.<sup>25</sup>

The direct impact of public health advocates in bringing the alcohol issue to the forefront of public awareness seemed limited. Contrary to the trend observed by some researchers,<sup>26</sup> in the articles we examined we

found that alcohol was rarely compared or associated with illegal drugs. The strong increase after 1987 in workplace and policy-related topics involving alcohol can, however, be attributed to efforts of media advocacy programs, which began to focus on this topic at that time.

During the study period, the US press did not write favorably about alcohol. Its evaluations of alcohol use were largely neutral or ambivalent and often negative. The finding that most editorials, although limited in number, expressed a negative view of alcohol consumption suggests that editors are not as biased toward presenting a favorable image of drinking as they are, for example, toward tobacco use.<sup>27</sup> Despite the increasing number of scientific findings for beneficial effects of moderate alcohol consumption, we found that very few positive messages about alcohol reached the public through press coverage during the period of our study, although advertising messages (not investigated) undoubtedly counterbalanced this. The decline after 1990 in the proportion of articles with an outspoken negative slant toward alcohol consumption may indicate that the social evaluation of alcohol is changing.<sup>28</sup> An extension of the study period would allow us to monitor this important issue.

In general, the print media in the United States did not express a moralistic attitude toward the alcohol issue during the period of our study. Naturalistic explanations for alcohol-related problems were given, with the cause of such problems largely attributed to external rather than personal factors. In accord with Linsky’s finding,<sup>17</sup> we found that the medical view of alcoholism (as a disease), in association with an internal (biological and

psychological) explanation for alcohol-related problems, was apparent in only a few articles. The declining preference for an internal explanation for alcohol-related problems, which was pervasive throughout the 1940s and 1950s, had continued in the late 1980s.

In more than two thirds of the articles that expressed an etiologic explanation for alcohol abuse, alcohol consumption was portrayed as an environmental hazard. This indicates a further shift toward an environmental perspective on alcoholism within recent decades.<sup>29</sup> The public health model emphasizes environmental risk factors as major causes of noninfectious diseases. Although this perspective seems well reflected in our national press data on alcohol, some caution is appropriate, given that our results are based on only about two thirds of the alcohol-related articles published during this period and that interrater reliability of “conceptual orientation” for the articles in our study was not very high.

We noted that readership of newspapers in the 1980s was high. A study by Bogart<sup>30</sup> found that about two thirds of all persons older than 18 years had opened a newspaper on any given day in 1982. The restriction of material in the present study to 5 national newspapers in the United States may make generalizations of our findings to all regional and metropolitan newspapers problematic. There is indeed some evidence that both national and metropolitan newspapers show more emotional distance than do local newspapers and are more likely to focus on formal (e.g., legislative) aspects of these topics.<sup>31</sup>

Partly offsetting this limitation is the heavy reliance of smaller newspapers on national newspapers for their information. The *New York Times* and *Washington Post*, heavily represented in our study, are major sources of printed information in the United States, and their coverage of daily affairs has a high impact on other media, including local newspapers. One would therefore expect that the information analyzed in our study had quite a large readership. Nevertheless, the high reliance of the study on national newspapers may give too narrow a view of the information the public actually received about alcohol during the study period, and the study also omitted advertising messages. Therefore, a broader study of the image of alcohol in the media, including an extension to regional papers, magazines, and television, is needed. □

## Contributors

P. H. Lemmens planned the study, analyzed the data, and wrote the paper. P. A. C. Vaeth collected the data, coded the newspaper articles, and assisted in analyzing

ing the data. T.K. Greenfield was the principal investigator for the Warning Label Project (grant AA 08557 from the National Institute on Alcohol Abuse and Alcoholism to the Alcohol Research Group), of which this study is an outcome. Both P.A.C. Vaeth and T.K. Greenfield contributed to the writing of the paper.

## Acknowledgments

This study was supported in part by grant AA 08557 from the National Institute on Alcohol Abuse and Alcoholism to the Alcohol Research Group and in part by grant 033815 from the Substance Abuse Policy Research Program of the Robert Wood Johnson Foundation to the Public Health Institute. For their help in collecting data, we gratefully acknowledge Mieke Derickx, Mary Douglas, and Andrea Mitchell.

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